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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,632	03/23/2001	David L. Turock	36203-00001	7103

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EXAMINER

SHANNON, MICHAEL R

ART UNIT PAPER NUMBER

2614

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/816,632	Applicant(s) TUROCK ET AL.	
	Examiner Michael R Shannon	Art Unit 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

Page 7, line 19 refers to "Internet 390", which is understood as a typographical error and should be corrected to read "Internet 340".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 12 is rejected under 35 U.S.C. 102(e) as being anticipated by Shoff et al (USPN 6,240,555), cited by examiner.

Regarding claim 12, the claimed "system for recording an auxiliary signal, synchronizing the auxiliary signal with a video signal, and transmitting the auxiliary signal over a telecommunications network" is met as follows:

- The claimed "first computer having means for recording the auxiliary signal" is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].

- The claimed “first computer having... means for receiving the video signal” is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].
- The claimed “first computer having... means for deriving a synchronizing signal from the video signal” is met by the inherent teaching of the clock signal deriver during the discussion of the timing information of a video being used to synchronize presentations [col. 10, lines 7-17].
- The claimed, “first computer having... means for transmitting the auxiliary signal over the telecommunications network” is met by the inherent interface for connection to the first network 74 [col. 7, lines 19-23].
- The claimed “second computer having means for receiving the auxiliary signal and the synchronizing signal from the telecommunications network” is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10], the digital data for synchronization then being transmitted with the supplemental data to the receiver [col. 10, lines 7-21].
- The claimed “second computer having... means for receiving the video signal” is met by the teaching of the “two receivers, for receiving the video stream from the head end and the digital supplemental data from the head end or ISP” [col. 8, lines 8-12].
- The claimed “second computer having... means for synchronizing the auxiliary signal and the synchronizing signal with the video signal to form

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an integrated combined signal” is met by the inherent teaching of the comparator during the discussion of the timing information of a video being used to synchronize presentations and coordinate the supplemental content [col. 10, lines 7-17] after the transmission to the receiver.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al (USPN 6,240,555), cited by examiner, in view of Silver (USPN 5,387,943), cited by examiner.

Regarding claim 1, the claimed “system for recording an auxiliary signal, synchronizing the auxiliary signal with a video signal, and transmitting the auxiliary signal over a telecommunications network” is met as follows:

The Shoff reference teaches all of the following:

- The claimed “first video signal receiver” is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].

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- The claimed “auxiliary signal recorder” is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].
- The claimed, “first telecommunications network interface” is met by the inherent interface for connection to the first network 74 [col. 7, lines 19-23].
- The claimed “second telecommunications network interface” is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10].

The Shoff reference does not disclose the signal comparator or the video signal buffer. The Silver reference, however, discloses the following:

- The claimed “signal comparator” is met by the correlation processor 16 [col. 2, lines 24-28].
- The claimed “video signal buffer” is met by the frame buffer 18 [col. 2, lines 24-28].

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a signal comparator and a frame buffer, in order to allow for an easy, standard, and straightforward way to synchronize supplementary data and primary video data.

Regarding claim 2, the claimed “first computer and a second computer” are met by the Shoff reference, wherein he teaches a transmitting computer (which stores and

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transmits video content or supplemental content) [Item 22, Fig. 4] and a receiving computer (which receives the video content and supplemental content, from either one source or two sources) [Item 68, Fig. 4].

Regarding claim 3, the claimed system is met as follows:

The Shoff reference teaches all of the following:

- The claimed “first video signal receiver” in the “first computer” is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].
- The claimed “auxiliary signal recorder” in the “first computer” is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].
- The claimed, “first telecommunications network interface” in the “first computer” is met by the inherent interface for connection to the first network 74 [col. 7, lines 19-23].
- The claimed “second telecommunications network interface” in the “second computer” is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10].

The Shoff reference does not disclose the signal comparator or the video signal buffer in the “first computer”. The Silver reference, however, discloses the following:

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- The claimed “signal comparator” in the “first computer” is met by the correlation processor 16 [col. 2, lines 24-28].
- The claimed “video signal buffer” in the “first computer” is met by the frame buffer 18 [col. 2, lines 24-28].

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a signal comparator and a frame buffer in the “first computer”, in order to allow for an easy, standard, and straight-forward way to synchronize supplementary data and primary video data prior to transmission to the client/receiver device.

Regarding claim 4, the claimed system is met as follows:

The Shoff reference teaches all of the following:

- The claimed “first video signal receiver” in the “first computer” is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].
- The claimed “auxiliary signal recorder” in the “first computer” is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].
- The claimed, “first telecommunications network interface” in the “first computer” is met by the inherent interface for connection to the first network 74 [col. 7, lines 19-23].



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- The claimed “second telecommunications network interface” in the “second computer” is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10].
- The claimed “second video signal receiver” in the “second computer” is met by the teaching of the “two receivers, for receiving the video stream from the head end and the digital supplemental data from the head end or ISP” [col. 8, lines 8-12].

The Shoff reference does not disclose the signal comparator or the video signal buffer in the “second computer”. The Silver reference, however, discloses the following:

- The claimed “signal comparator” in the “second computer” is met by the correlation processor 16 [col. 2, lines 24-28].
- The claimed “video signal buffer” in the “second computer” is met by the frame buffer 18 [col. 2, lines 24-28].

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a signal comparator and a frame buffer in the “second computer”, in order to allow for an easy, standard, and straight-forward way to synchronize supplementary data and primary video data after reception of the two signals at the client/receiver device.

Regarding claim 5, the claimed “auxiliary signal include[ing] an audio signal” is met by the discussion (in the Shoff reference) of the supplemental content being text, graphics, video, picture, sound, or other multimedia types [col. 5, lines 15-18].

Regarding claim 6, the claimed “auxiliary signal include[ing] a video signal” is met by the discussion (in the Shoff reference) of the supplemental content being text, graphics, video, picture, sound, or other multimedia types [col. 5, lines 15-18].

Regarding claim 7, the Shoff and Silver references disclose all of that which is discussed above with regards to claim 2. The claimed “video signal speed controller” is not met by the Shoff reference. The Silver reference, however, teaches a Video Delay 12, which is used to control the speed and delay of the video signal for synchronization [col. 2, line 66 – col. 3, line 6]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a video signal speed controller in one of the two computers, in order to allow the video to be delayed and/or the speed modified to allow the video and supplemental data to be synchronized properly.

Regarding claim 8, the claimed “image size controller” is met in the Shoff reference, by the inherent teaching of the size controller during the discussion of the processor scaling of video data for display within the program boundary according to supplemental data display layout [col. 10, lines 37-43].

Regarding claim 9, the claimed "video signal clock signal driver" is met in the Shoff reference, by the inherent teaching of the clock signal driver during the discussion of the timing information of a video being used to synchronize presentations [col. 10, lines 7-17].

Regarding claim 10, the claimed "Internet interface" is met in the Shoff reference, wherein the Internet is disclosed as a possible distribution network of the supplemental data [col. 7, lines 26-35].

Regarding claim 11, the claimed "clock signal comparator" is met in the Shoff reference, by the inherent teaching of the comparator during the discussion of the timing information of a video being used to synchronize presentations and coordinate the supplemental content [col. 10, lines 7-17].

Regarding claim 13, the claimed "method for recording an auxiliary signal, synchronizing the auxiliary signal with a video signal, and transmitting the auxiliary signal over a telecommunication network" is met as follows:

The Shoff reference teaches all of the following:

- The claimed step of "receiving the video signal" is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].

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- The claimed step of “generating the auxiliary signal, the auxiliary signal derived at least in part from said video signal” is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18], and the fact that the supplemental content is derived at least in part from the video signal is met by the fact that the supplemental content is said to be “related to the program” [col. 5, line 19].
- The claimed step of “transmitting the auxiliary signal over the telecommunications network” is met by network 74, which serves to send auxiliary data from the head end or other ISP to the receiver [col. 7, lines 19-23].
- The claimed step of “receiving the auxiliary signal” is met by the teaching of the “two receivers, for receiving the video stream from the head end and the digital supplemental data from the head end or ISP” [col. 8, lines 8-12].

The claimed steps of “delaying the video signal as a function of said auxiliary signal, and synchronizing the video signal with the auxiliary signal” are not met by the Shoff reference. The Silver reference, however, discloses the following:

- The claimed step of “delaying the video signal as a function of said auxiliary signal” is met by the fact that the video signal can be delayed in the Video Delay Circuit 12 as a function of the Audio (Auxiliary signal) through the use of the correlation processor 16 [col. 2, line 66 – col. 3, line 6].

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- The claimed step of “synchronizing the video signal with the auxiliary signal” is met by the correlation processor 16 and it’s ability to control the delay circuits 12 and 14, in order to synchronize the audio and video [col. 2, line 66 – col. 3, line 6].

It would have been obvious to one of ordinary skill in the art at the time of the invention to delay the video signal to synchronize the supplemental signal and the video signal, in order to allow the video signal to be delayed and the correct synchronization to take place before display to the user.

Regarding claim 14, the claimed “method” is met as follows:

The Shoff reference teaches all of the following:

- The claimed “video signal receiving” step being performed with a first computer is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].
- The claimed “auxiliary signal generating” step being performed with a first computer is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].
- The claimed, “auxiliary signal transmitting” step being performed with a first computer is met by the inherent interface for connection and transmission of auxiliary signals to the first network 74 [col. 7, lines 19-23].

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- The claimed “auxiliary signal receiving step” being performed with a second computer is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10].

The Shoff reference does not disclose the video signal delaying step or the synchronizing step being performed with a first computer. The Silver reference, however, discloses the following:

- The claimed “video signal delaying” step being performed with a first computer is met by the correlation processor 16 [col. 2, lines 24-28], and it’s ability to delay the video signal as a function of the supplementary audio signal.
- The claimed “synchronizing” step being performed with a first computer is met by the correlation processor 16 [col. 2, lines 24-28], and it’s ability to delay the video signal as a function of the supplementary audio signal in order to synchronize the video with the supplemental information (audio).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a video signal delaying step and a synchronizing step in the first computer, in order to allow for an easy, standard, and straight-forward way to synchronize supplementary data and primary video data prior to transmission to the client/receiver device.

Regarding claim 15, the claimed “method” is met as follows:

The Shoff reference teaches all of the following:

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- The claimed “video signal receiving” step being performed with a first computer is met by the head end and the inherent teaching of a receiver for receiving and serving continuous media to and from the head end and the enhanced content server 52 [col. 5, lines 12-18].
- The claimed “auxiliary signal generating” step being performed with a first computer is met by the discussion of the creation and storage of supplemental content at the enhanced content server 52 [col. 5, lines 12-18].
- The claimed, “auxiliary signal transmitting” step being performed with a first computer is met by the inherent interface for connection and transmission of auxiliary signals to the first network 74 [col. 7, lines 19-23].
- The claimed “auxiliary signal receiving step” being performed with a second computer is met by the inherent interface connection at the at least one receiver [col. 8, lines 7-10].

The Shoff reference does not disclose the video signal delaying step or the synchronizing step being performed with a second computer. The Silver reference, however, discloses the following:

- The claimed “video signal delaying” step being performed with a second computer is met by the correlation processor 16 [col. 2, lines 24-28], and it’s ability to delay the video signal as a function of the supplementary audio signal.

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- The claimed “synchronizing” step being performed with a second computer is met by the correlation processor 16 [col. 2, lines 24-28], and it’s ability to delay the video signal as a function of the supplementary audio signal in order to synchronize the video with the supplemental information (audio).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a video signal delaying step and a synchronizing step in the second computer, in order to allow for an easy, standard, and straight-forward way to synchronize supplementary data and primary video data after reception at the client/receiver device.

Regarding claim 16, the claimed “step of receiving the video signal using the said second computer” is met by the teaching of the “two receivers, for receiving the video stream from the head end and the digital supplemental data from the head end or ISP” [col. 8, lines 8-12].

Regarding claim 17, the claimed “generating step further includes deriving a first synchronizing signal from the video signal” is met by the program start time being extracted from the video signal [col. 10, lines 7-17].

Regarding claim 18, the claimed “delaying step further includes deriving a second synchronizing signal from the video signal and comparing said first and second



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synchronizing signals” is met by the careful measurement of time from that last start time in order to synchronize the presentation [col. 10, lines 7-17]. While the Shoff reference does not explicitly disclose the used of a delay circuit to enable this synchronization, the Silver reference does with Video Delay 12, which delays the video as a function of the supplementary signal. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a delay circuit, in order to allow for an easy, standard, and straightforward way to synchronize supplementary data and primary video data.

Regarding claim 19, the claimed “auxiliary signal [being] an audio signal” is met by the discussion (in the Shoff reference) of the supplemental content being text, graphics, video, picture, sound, or other multimedia types [col. 5, lines 15-18].

Regarding claim 20, the claimed “step of playing said synchronized video and auxiliary signals using a computer” is met by the discussion of the supplemental content being displayed on the computer screen, synchronized with the video program [col. 10, lines 55-58].

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Watts et al (USPN 6,324,694) disclose a system for synchronizing subsidiary data with primary content.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon whose telephone number is (571) 272-7356. The examiner can normally be reached Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon  
Examiner  
Art Unit 2614

Michael R Shannon  
February 23, 2005

  
**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**